

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
101			JOB		FORTRAN COMPILER -- ARITH PHASE FOUR -- PHASE 36								
102			CTL		6611								
103			*										
104			*		STRINGS GENERATED BY ARITH PHASE TWO ARE OPTIMIZED TO REDUCE								
105			*		THE NUMBER OF TEMPORARY STORAGE AREAS FOR EACH STATEMENT.								
106			*										
107			*		ON ENTRY, X1 IS THE TOP OF THE TOPMOST STATEMENT IN LOW CORE								
108			*		THAT IS NEITHER AN ASSIGNMENT NOR IF STATEMENT, X2 IS THE TOP								
109			*		OF THE TOPMOST STATEMENT IN HIGH CORE THAT IS NEITHER AN								
110			*		ASSIGNMENT NOR IF STATEMENT, X3 IS THE TOP OF THE PREFIX OF								
111			*		THE TOPMOST STATEMENT IN HIGH COORE THAT IS EITHER AN								
112			*		ASSIGNMENT OR IF STATEMENT, AND 81-83 IS THE GMWM ABOVE THE								
113			*		TOPMOST STATEMENT IN HIGH CORE.								
114			*										
115			X1	EQU	89			0089					
116			X2	EQU	94			0094					
117			X3	EQU	99			0099					
118			*										
119			*		STUFF IN THE RESIDENT AREA								
120			*										
121			SAWNEG	EQU	123 SAW NEGATION OPERATOR (UNARY MINUS) IF NO WM			0123					
122			SNAPSH	EQU	333 CORE DUMP SNAPSHOT			0333					
123			LOADNX	EQU	700 LOAD NEXT OVERLAY			0700					
124			*										
125			*		RUNTIME ADDRESSES								
126			*										
127			ARITF	EQU	700			0700					
128			*										
129					EXT03 START, TOP OF PHASE 3					MACRO			
130			BEGIN3	EQU	838			0838		GEN			
131			TOP3	EQU	2600			2600		GEN			
132			*										
133			110	DCW	@ARITH 4@	7	0110				1		
134			*										
135			PHAS36	LDPH	ARITH FOR,LOADAD,BEGN36					MACRO			
			*	PHAZ	LDPH PHASID,LOADAD,ENTAD[,LOADAD,LOADAD,...]					GEN			
			*							GEN			
			*	LOAD	A PHASE THAT HAS UP TO FOUR BLOCKS					GEN			
			*							GEN			
136			.PHAS	EQU	110 PHASE ID			0110		GEN			
137			.LDNX	EQU	700 LOAD NEXT PHASE			0700		GEN			
138			.TPRD	EQU	708 TAPE READ INSTRUCTION			0708		GEN			
139			.TPER	EQU	728 TAPE ERROR HANDLER			0728		GEN			
			*							GEN			
140			ORG		201				0201				
141			PHAS36	LCA	)9J002,.PHAS	7	0201	L 252 110	GEN		2	252	110
142				BCE	.LDNX,.LDNX,1 Q: LOADING FROM CARDS?	8	0208	B 700 700 1	GEN		2	700	700
143				BCE	.LDNX,.TPRD&6,0 Q: LOADING FROM AUTOCODER TAPE?	8	0216	B 700 714 0	GEN		2	700	714
144				RTW	1,LOADAD READ THE FIRST BLOCK	8	0224	L %U1 838 R	GEN		2	%U1	838
145				BER	.TPER Q: TAPE ERROR?	5	0232	B 728 L	GEN		2	728	

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146				CS	BEGN36,)9R002	7		0237	/ 838 253	GEN	3	838	253
147)9J002	DCW	@ARITH FOR@	9		0252		GEN	3		
148			)9R002	DCW	@}@	1		0253		GEN	3		
149				XFR	PHAS36				B 201		4	201	
150			*										
151				ORG	BEGIN3				0838				
152			LOADAD	EQU	*&1			0838					
					LOAD ADDRESS								
153	838		BEGN36	BCE	DONE, X2, .	8		0838	B R37 094 .		5	2937	094
154	846			SW	GM	4		0846	, K40		5	2240	
155	850			SBR	SX3, 0&X3	7		0850	H R48 0?0		5	2948	000+3
156	857			SBR	X1, 1&X1	7		0857	H 089 0|1		5	089	001+1
157	864			SBR	X2, 1&X2	7		0864	H 094 0!1		5	094	001+2
158	871		LOOP	S	WRKTOP	4		0871	S N72		5	2572	
159	875			C	X2, SX3	7		0875	C 094 R48		6	094	2948
160	882			BE	DONE	5		0882	B R37 S		6	2937	
161	887			MCW	KB4, 3021	7		0887	M ?31 ?21		6	3031	3021
162	894			SBR	SX1, 0&X1	7		0894	H R51 0|0		6	2951	000+1
163	901		OUTER	MCW	KB4, OP2	7		0901	M ?31 R52		6	3031	2952
164	908			CW	FLAG	4		0908	) R36		6	2936	
165	912			B	SETUP	4		0912	B N73		7	2573	
166	916			BCE	TESTEQ, W18A-2, <	8		0916	B 974 ?47 <		7	974	3047
167	924		MIDDLE	BCE	1166, W18B-2, <	8		0924	B /66 ?72 <		7	1166	3072
168	932			BCE	1733, 1&X2, }	8		0932	B X33 0!1 }	GMARK	7	1733	001+2
169	940			BW	1302, FLAG	8		0940	V T02 R36 1		7	1302	2936
170	948		INNER	A	K3999, 2972	7		0948	A R55 R72		8	2955	2972
171	955			MCW	2972, X3	7		0955	M R72 099		8	2972	099
172	962			BCE	INNER, WORK&X3, 1	8		0962	B 948 KD1 1		8	948	2241+3
173	970			B	OUTER	4		0970	B 901		8	901	
174	974		TESTEQ	BCE	MIDDLE, OP, #	8		0974	B 924 ?50 #		8	924	3050
175	982			BCE	1328, OP, . WAS **	8		0982	B T28 ?50 .		9	1328	3050
176	990			B	2758	4		0990	B P58		9	2758	
177	996			DSA	W18A	3		0996	?49		9	3049	
178	997			B	2837	4		0997	B Q37		9	2837	
179	1 001			MN	KP1, WORK&X1	7		1001	D R59 KU1		9	2959	2241+1
180	1 008			LCA	0&X3, W35	7		1008	L 0?0 R94		9	000+3	2994
181	1 015			SAR	X1	4		1015	Q 089		9	089	
182	1 019		MOVE13	C	X1, X2 MOVE	7		1019	C 089 094		10	089	094
183	1 026			BE	M13X 0&X1	5		1026	B |54 S		10	1054	
184	1 031			LCA	0&X1, 0&X3 UP TO	7		1031	L 0|0 0?0		10	000+1	000+3
185	1 038			SAR	X1 0&X3	4		1038	Q 089		10	089	
186	1 042			C	0&X3 UNTIL	4		1042	C 0?0		10	000+3	
187	1 046			SAR	X3 X1 EQUAL X2	4		1046	Q 099		10	099	
188	1 050			B	MOVE13	4		1050	B |19		10	1019	
189	1 054		M13X	C	0&X2	4		1054	C 0!0		11	000+2	
190	1 058			SAR	X1	4		1058	Q 089		11	089	
191	1 062			BW	2928, FLAG	8		1062	V R28 R36 1		11	2928	2936
192	1 070			BCE	1101, W18B, *	8		1070	B /01 ?74 *		11	1101	3074
193	1 078			BCE	1695, OP, #	8		1078	B W95 ?50 #		11	1695	3050
194	1 086			LCA	W18B, 0&X3	7		1086	L ?74 0?0		11	3074	000+3
195	1 093			SBR	X3	4		1093	H 099		12	099	

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
196	1	097		CW	1&X3	4		1097	) 0?1		12	001+3	
197	1	101		LCA	OP,0&X3	7		1101	L ?50 0?0		12	3050	000+3
198	1	108		SBR	X3	4		1108	H 099		12	099	
199	1	112		CW	1&X3	4		1112	) 0?1		12	001+3	
200	1	116		LCA	W35,0&X3	7		1116	L R94 0?0		12	2994	000+3
201	1	123		SBR	X3	4		1123	H 099		12	099	
202	1	127		SBR	X2	4		1127	H 094		13	094	
203	1	131		LCA	0&X1,0&X3	7		1131	L 0|0 0?0		13	000+1	000+3
204	1	138		SAR	X1	4		1138	Q 089		13	089	
205	1	142		C	0&X3	4		1142	C 0?0		13	000+3	
206	1	146		SAR	X3	4		1146	Q 099		13	099	
207	1	150		BCE	1162,1&X1,}	8		1150	B /62 0|1 } GMARK		13	1162	001+1
208	1	158		B	1131	4		1158	B /31		13	1131	
209	1	162		B	901	4		1162	B 901		14	901	
210	1	166		BCE	1178,OP2,	8		1166	B /78 R52		14	1178	2952
211	1	174		B	1496	4		1174	B U96		14	1496	
212	1	178		BCE	1663,OP,#	8		1178	B W63 ?50 #		14	1663	3050
213	1	186		BCE	1214,OP,&	8		1186	B S14 ?50 &		14	1214	3050
214	1	194		BCE	1214,OP,*	8		1194	B S14 ?50 *		15	1214	3050
215	1	202		BCE	1239,OP,-	8		1202	B S39 ?50 -		15	1239	3050
216	1	210		B	1527	4		1210	B V27		15	1527	
217	1	214		LCA	W18A,W35	7		1214	L ?49 R94		15	3049	2994
218	1	221		LCA	W18B,W18A	7		1221	L ?74 ?49		15	3074	3049
219	1	228		LCA	W35,W18B	7		1228	L R94 ?74		16	2994	3074
220	1	235		B	974	4		1235	B 974		16	974	
221	1	239		BW	1379,FLAG	8		1239	V T79 R36 1		16	1379	2936
222	1	247		LCA	W18A,0&X2	7		1247	L ?49 0!0		16	3049	000+2
223	1	254		LCA	KPLUS	4		1254	L R95		16	2995	
224	1	258		SBR	X2	4		1258	H 094		16	094	
225	1	262		CW	2&X2,SAWNEG	7		1262	) 0!2 123		17	002+2	123
226	1	269		LCA	W18B,W18A	7		1269	L ?74 ?49		17	3074	3049
227	1	276		LCA	KSTAR3,W18B	7		1276	L R98 ?74		17	2998	3074
228	1	283		MCW	NOP,OP	7		1283	M R99 ?50		17	2999	3050
229	1	290		CW	SAWNEG	4		1290	) 123		17	123	
230	1	294		SW	FLAG	4		1294	, R36		17	2936	
231	1	298		B	974	4		1298	B 974		18	974	
232			*										
233	1	302		BCE	1328,W18B,*	8		1302	B T28 ?74 *		18	1328	3074
234	1	310		MCW	OP,1324	7		1310	M ?50 T24		18	3050	1324
235	1	317		BCE	1391,3017,0	8		1317	B T91 ?17 0		18	1391	3017
236	1	325		B		1		1325	B		18		
237	1	326		B		1		1326	B		18		
238	1	327		B		1		1327	B		18		
239	1	328		BW	*&5,FLAG	8		1328	V T40 R36 1		19	1340	2936
240	1	336		B	INNER	4		1336	B 948		19	948	
241	1	340		B	1379	4		1340	B T79		19	1379	
242	1	344		BW	1360,2&X2	8		1344	V T60 0!2 1		19	1360	002+2
243	1	352		SBR	X2	4		1352	H 094		19	094	
244	1	356		B	1344	4		1356	B T44		19	1344	
245	1	360		SBR	X2,1&X2	7		1360	H 094 0!1		19	094	001+2

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
246	1	367		BCE	1733,1&X2, } GMARK	8		1367	B X33 0!1 } GMARK		20	1733	001+2
247	1	375		B	INNER	4		1375	B 948		20	948	
248			*										
249	1	379		SBR	1390	4		1379	H T90		20	1390	
250	1	383		CW	1&X2	4		1383	) 0!1		20	001+2	
251	1	387		B	0	4		1387	B 000		20	000	
252			*										
253	1	391		BCE	1403,OP2,	8		1391	B U03 R52		20	1403	2952
254	1	399		B	1440	4		1399	B U40		20	1440	
255	1	403		MCW	OP,OP2	7		1403	M ?50 R52		21	3050	2952
256	1	410		CW	1&X2	4		1410	) 0!1		21	001+2	
257	1	414		LCA	W18B,0&X2	7		1414	L ?74 0!0		21	3074	000+2
258	1	421		SBR	X2	4		1421	H 094		21	094	
259	1	425		CW	KEEPWM	4		1425	) ?04		21	3004	
260	1	429		SBR	RWM1&3,1&X2 REMEMBER WHERE TO CLEAR WM	7		1429	H 0!7 0!1		21	2617	001+2
261	1	436		B	908	4		1436	B 908		21	908	
262	1	440		BCE	1476,OP2,&	8		1440	B U76 R52 &		22	1476	2952
263	1	448		BCE	1476,OP2,-	8		1448	B U76 R52 -		22	1476	2952
264	1	456		BCE	1410,OP,*	8		1456	B U10 ?50 *		22	1410	3050
265	1	464		BCE	1410,OP,/	8		1464	B U10 ?50 /		22	1410	3050
266	1	472		B	1328	4		1472	B T28		22	1328	
267	1	476		BCE	1410,OP,&	8		1476	B U10 ?50 &		23	1410	3050
268	1	484		BCE	1410,OP,-	8		1484	B U10 ?50 -		23	1410	3050
269	1	492		B	1328	4		1492	B T28		23	1328	
270	1	496		MCW	OP,1510	7		1496	M ?50 V10		23	3050	1510
271	1	503		BCE	1575,OP2,0	8		1503	B V75 R52 0		23	1575	2952
272	1	511		BCE	1555,OP2,&	8		1511	B V55 R52 &		24	1555	2952
273	1	519		BCE	1555,OP2,-	8		1519	B V55 R52 -		24	1555	2952
274	1	527		BCE	1733,1&X2, }	8		1527	B X33 0!1 } GMARK		24	1733	001+2
275	1	535		BW	1328,FLAG	8		1535	V T28 R36 1		24	1328	2936
276	1	543		BW	INNER,1&X2	8		1543	V 948 0!1 1		25	948	001+2
277	1	551		B	1328	4		1551	B T28		25	1328	
278	1	555		BCE	1575,OP,&	8		1555	B V75 ?50 &		25	1575	3050
279	1	563		BCE	1575,OP,-	8		1563	B V75 ?50 -		25	1575	3050
280	1	571		B	1527	4		1571	B V27		25	1527	
281	1	575		BCE	1328,OP,@	8		1575	B T28 ?50 @		26	1328	3050
282	1	583		BW	1379,FLAG	8		1583	V T79 R36 1		26	1379	2936
283	1	591		C	0&X2,KB4	7		1591	C 0!0 ?31		26	000+2	3031
284	1	598		SAR	X3	4		1598	Q 099		26	099	
285	1	602		MCW	0&X3,0&X2	7		1602	M 0?0 0!0		26	000+3	000+2
286	1	609		SBR	X2	4		1609	H 094		26	094	
287	1	613		BCE	1644,OP,-	8		1613	B W44 ?50 -		27	1644	3050
288	1	621		MCW	OP,0&X2	7		1621	M ?50 0!0		27	3050	000+2
289	1	628		MCW	W18B	4		1628	M ?74		27	3074	
290	1	632		C	0&X2	4		1632	C 0!0		27	000+2	
291	1	636		SBR	X2	4		1636	H 094		27	094	
292	1	640		B	901	4		1640	B 901		27	901	
293	1	644		LCA	KPLUS,0&X2	7		1644	L R95 0!0		27	2995	000+2
294	1	651		SBR	X2	4		1651	H 094		28	094	
295	1	655		SW	FLAG	4		1655	, R36		28	2936	

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
296	1	659		B	1269	4		1659	B S69		28	1269	
297	1	663		B	2758	4		1663	B P58		28	2758	
298	1	669		DSA	W18B	3		1669	?74		28	3074	
299	1	670		MCW	W18B,3021	7		1670	M ?74 ?21		28	3074	3021
300	1	677		MCW	3091,2972	7		1677	M ?91 R72		28	3091	2972
301	1	684		A	KP1,2972	7		1684	A R59 R72		29	2959	2972
302	1	691		B	997	4		1691	B 997		29	997	
303	1	695		LCA	W35,0&X3	7		1695	L R94 0?0		29	2994	000+3
304	1	702		SBR	X2	4		1702	H 094		29	094	
305	1	706		LCA	OP	4		1706	L ?50		29	3050	
306	1	710		SBR	X3	4		1710	H 099		29	099	
307	1	714		CW	1&X3	4		1714	) 0?1		29	001+3	
308	1	718		LCA	W18A,0&X3	7		1718	L ?49 0?0		30	3049	000+3
309	1	725		LCA	GM	4		1725	L K40		30	2240	
310	1	729		B	901	4		1729	B 901		30	901	
311	1	733		MCW	SX1,X1	7		1733	M R51 089		30	2951	089
312	1	740		SBR	3024,0&X2	7		1740	H ?24 0!0		30	3024	000+2
313	1	747		BCE	1887,2&X2,,	8		1747	B Y87 0!2 ,		30	1887	002+2
314	1	755		BCE	1887,3019,<	8		1755	B Y87 ?19 <		31	1887	3019
315	1	763		BCE	1887,0&X2,\$	8		1763	B Y87 0!0 \$		31	1887	000+2
316	1	771		BCE	1887,W18A,\$	8		1771	B Y87 ?49 \$		31	1887	3049
317	1	779		BM	1807,3062	8		1779	V Y07 ?62 K		31	1807	3062
318	1	787		BM	1887,3087	8		1787	V Y87 ?87 K		32	1887	3087
319	1	795		BWZ	1887,3087,S	8		1795	V Y87 ?87 S		32	1887	3087
320	1	803		B	1823	4		1803	B Y23		32	1823	
321	1	807		BWZ	1887,3087,2	8		1807	V Y87 ?87 2		32	1887	3087
322	1	815		BWZ	1887,3087,B	8		1815	V Y87 ?87 B		32	1887	3087
323	1	823		B	1887	4		1823	B Y87		33	1887	
324	1	827		LCA	W18A	4		1827	L ?49		33	3049	
325	1	831		LCA	W18B	4		1831	L ?74		33	3074	
326	1	835		LCA	LCA	4		1835	L ?11		33	3011	
327	1	839		SBR	X3	4		1839	H 099		33	099	
328	1	843		CW	2&X3,5&X3	7		1843	) 0?2 0?5		33	002+3	005+3
329	1	850		MZ	1852,3&X3	7		1850	Y Y52 0?3		33	1852	003+3
330	1	857		MZ	1859,6&X3	7		1857	Y Y59 0?6		34	1859	006+3
331	1	864		SBR	X1,6&X1	7		1864	H 089 0|6		34	089	006+1
332	1	871		LCA	6&X2	4		1871	L 0!6		34	006+2	
333	1	875		LCA		1		1875	L		34		
334	1	876		SBR	X2,6&X2	7		1876	H 094 0!6		34	094	006+2
335	1	883		B	LOOP	4		1883	B 871		34	871	
336	1	887		MCW	3027,3021	7		1887	M ?27 ?21		34	3027	3021
337	1	894		MCW	A001,X3	7		1894	M ?16 099		35	3016	099
338	1	901		MCW	3027,3032	7		1901	M ?27 ?32		35	3027	3032
339	1	908		SBR	X1,4&X1	7		1908	H 089 0|4		35	089	004+1
340	1	915		LCA	BARITF&3	4		1915	L ?22		35	3022	
341	1	919		BCE	1963,WORK&X3,0	8		1919	B Z63 KD1 0		35	1963	2241+3
342	1	927		A	KP1,3032	7		1927	A R59 ?32		36	2959	3032
343	1	934		MCW	3032,3021	7		1934	M ?32 ?21		36	3032	3021
344	1	941		MZ	3031,3021	7		1941	Y ?31 ?21		36	3031	3021
345	1	948		A	KP1,X3	7		1948	A R59 099		36	2959	099

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
346	1	955		SW	FLAG	4		1955	, R36		36	2936	
347	1	959		B	1919	4		1959	B Z19		36	1919	
348	1	963		LCA	ASSIGN, 4&X1	7		1963	L ?23 0|4		37	3023	004+1
349	1	970		LCA	3021	4		1970	L ?21		37	3021	
350	1	974		CW	4&X1	4		1974	) 0|4		37	004+1	
351	1	978		C	0&X1, BARITF&3	7		1978	C 0|0 ?22		37	000+1	3022
352	1	985		BE	1994	5		1985	B Z94 S		37	1994	
353	1	990		CW	1&X1	4		1990	) 0|1		37	001+1	
354	1	994		LCA	GM, 1&X2	7		1994	L K40 0!1		37	2240	001+2
355	2	001		C	0&X2	4		2001	C 0!0		38	000+2	
356	2	005		SAR	X2	4		2005	Q 094		38	094	
357	2	009		BCE	2139, 0&X2, #	8		2009	B J39 0!0 #		38	2139	000+2
358	2	017		BCE	2147, 1&X2, \$	8		2017	B J47 0!1 \$		38	2147	001+2
359	2	025		MZ	2&X2, 2&X1	7		2025	Y 0!2 0|2		38	002+2	002+1
360	2	032		SBR	X1, 4&X1	7		2032	H 089 0|4		38	089	004+1
361	2	039	MORE	MCM	1&X2, 1&X1	7		2039	P 0!1 0|1		39	001+2	001+1
362	2	046		MN		1		2046	D		39		
363	2	047		SBR	X1	4		2047	H 089		39	089	
364	2	051		MCM	1&X2	4		2051	P 0!1		39	001+2	
365	2	055		MN		1		2055	D		39		
366	2	056		SAR	X2	4		2056	Q 094		39	094	
367	2	060		BCE	MORE, 0&X2, |	8		2060	B !39 0!0 |		39	2039	000+2
368	2	068		C	0&X2	4		2068	C 0!0		40	000+2	
369	2	072		SAR	X2	4		2072	Q 094		40	094	
370	2	076		MCW	X3, SX3A	7		2076	M 099 ?26		40	099	3026
371	2	083		MCW	3041, 0&X1	7		2083	M ?41 0|0		40	3041	000+1
372	2	090		LCA	0&X2	4		2090	L 0!0		40	000+2	
373	2	094		SBR	X3	4		2094	H 099		40	099	
374	2	098		CW	0&X1, 1&X3	7		2098	) 0|0 0?1		40	000+1	001+3
375	2	105		C	0&X2	4		2105	C 0!0		41	000+2	
376	2	109		SAR	X3	4		2109	Q 099		41	099	
377	2	113		BCE	2158, 0&X3, }	8		2113	B J58 0?0 } GMARK		41	2158	000+3
378	2	121		SBR	X2, 0&X3	7		2121	H 094 0?0		41	094	000+3
379	2	128		MCW	SX3A, X3	7		2128	M ?26 099		41	3026	099
380	2	135		B	1927	4		2135	B Z27		41	1927	
381	2	139		CW	1&X2	4		2139	) 0!1		41	001+2	
382	2	143		B	2001	4		2143	B !01		42	2001	
383	2	147		MZ	3&X2, 2&X1	7		2147	Y 0!3 0|2		42	003+2	002+1
384	2	154		B	2032	4		2154	B !32		42	2032	
385	2	158		C	0&X1, KB4	7		2158	C 0|0 ?31		42	000+1	3031
386	2	165		SAR	X1	4		2165	Q 089		42	089	
387	2	169		LCA	3041, 0&X1	7		2169	L ?41 0|0		42	3041	000+1
388	2	176		MCW	0&X2	4		2176	M 0!0		42	000+2	
389	2	180		MCW	3024, X2	7		2180	M ?24 094		43	3024	094
390	2	187		BW	2217, 6&X2	8		2187	V K17 0!6 1		43	2217	006+2
391	2	195		SW	3&X2	4		2195	, 0!3		43	003+2	
392	2	199		SBR	X1, 9&X1	7		2199	H 089 0|9		43	089	009+1
393	2	206		LCA	11&X2	4		2206	L 0J1		43	011+2	
394	2	210		SBR	X2, 11&X2	7		2210	H 094 0J1		43	094	011+2
395	2	217		SBR	X1, 6&X1	7		2217	H 089 0|6		44	089	006+1

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
396	2	224		LCA	6&X2	4		2224	L 0!6		44	006+2	
397	2	228		LCA		1		2228	L		44		
398	2	229		SBR	X2,6&X2	7		2229	H 094 0!6		44	094	006+2
399	2	236		B	LOOP	4		2236	B 871		44	871	
400	2	240	GM	DC	@}@	1		2240		GMARK	44		
401			WORK	EQU	*&1			2241					
402	2	290		DCW	#50	50		2290			46		
403	2	340		DC	#50	50		2340			48		
404	2	390		DC	#50	50		2390			50		
405	2	440		DC	#50	50		2440			52		
406	2	490		DC	#50	50		2490			54		
407	2	540		DC	#50	50		2540			56		
408	2	572	WRKTOP	DC	#32	32		2572			57		
409				*									
410				*	SKIP SUBSCRIPT IF PRESENT. COPY THE NEXT OPERAND INTO W18A								
411				*	AND THE NEXT OPERATOR INTO OP. BUMP X2 BY 4. IF THE								
412				*	OPERAND AFTER THE OPERATOR HAS A WORD MARK, PUT STARS INTO								
413				*	W3B, ELSE SKIP ANOTHER SUBSCRIPT IF PRESENT AND PUT THE								
414				*	NEXT OPERAND INTO W3B AND BUMP X3 BY THREE.								
415				*									
416	2	573	SETUP	SBR	SETUPX&3	4		2573	H P27		57	2727	
417	2	577		BCE	SKPSUB,1&X2,\$	8		2577	B P28 0!1 \$		58	2728	001+2
418	2	585		LCA	3&X2,W18A	7		2585	L 0!3 ?49		58	003+2	3049
419	2	592		MCW	4&X2,OP	7		2592	M 0!4 ?50		58	004+2	3050
420	2	599		SBR	X2,4&X2	7		2599	H 094 0!4		58	094	004+2
421	2	606		BW	*&5,KEEPWM	8		2606	V 018 ?04 1		58	2618	3004
422	2	614	RWM1	CW	0	4		2614	) 000		59	000	
423	2	618		SW	KEEPWM	4		2618	, ?04		59	3004	
424	2	622		BW	GOTWM,1&X2	8		2622	V 072 0!1 1		59	2672	001+2
425	2	630		SW	1&X2	4		2630	, 0!1		59	001+2	
426	2	634		SBR	RWM2&3,1&X2 REMEMBER WHERE TO CLEAR WM	7		2634	H P23 0!1		59	2723	001+2
427	2	641		MN	0&X2,*&15	7		2641	D 0!0 062		59	000+2	2662
428	2	648		MZ	0&X2,*&8	7		2648	Y 0!0 062		60	000+2	2662
429	2	655		BCE	GOTOP,OPS,0 &-*@.#	8		2655	B 083 ?56 0		60	2683	3056
430	2	663		CHAIN	5					MACRO			
431				BCE		1		2663	B	GEN	60		
432				BCE		1		2664	B	GEN	60		
433				BCE		1		2665	B	GEN	60		
434				BCE		1		2666	B	GEN	60		
435				BCE		1		2667	B	GEN	60		
436	2	668		SW	FLAG	4		2668	, R36		61	2936	
437	2	672	GOTWM	LCA	KSTAR3,W18B	7		2672	L R98 ?74		61	2998	3074
438	2	679		B	SETUPX	4		2679	B P24		61	2724	
439	2	683	GOTOP	BCE	SKPSUB,1&X2,\$	8		2683	B P28 0!1 \$		61	2728	001+2
440	2	691		LCA	3&X2,W18B	7		2691	L 0!3 ?74		61	003+2	3074
441	2	698		SBR	X2,3&X2	7		2698	H 094 0!3		61	094	003+2
442	2	705		BW	RWM2,1&X2	8		2705	V P20 0!1 1		62	2720	001+2
443	2	713		SW	1&X2,FLAG	7		2713	, 0!1 R36		62	001+2	2936
444	2	720	RWM2	CW	0	4		2720	) 000		62	000	
445	2	724	SETUPX	B	0	4		2724	B 000		62	000	

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
446			*										
447			* SKIP		SUBSCRIPT								
448			*										
449	2	728	SKPSUB	SBR	SKPSUX&3	4		2728	H P57		62	2757	
450	2	732		SBR	X2, 8&X2	7		2732	H 094 0!8		62	094	008+2
451	2	739		BCE	SKPSUX, 3&X2, \$	8		2739	B P54 0!3 \$		63	2754	003+2
452	2	747		SBR	X2, 6&X2	7		2747	H 094 0!6		63	094	006+2
453	2	754	SKPSUX	B	0	4		2754	B 000		63	000	
454			*										
455	2	758		SBR	X1	4		2758	H 089		63	089	
456	2	762		SBR	2836, 3&X1	7		2762	H Q36 0|3		63	2836	003+1
457	2	769		MCW	2&X1, X1	7		2769	M 0|2 089		63	002+1	089
458	2	776		MN	0&X1, 3091	7		2776	D 0|0 ?91		64	000+1	3091
459	2	783		MN		1		2783	D		64		
460	2	784		MCW	3092	4		2784	M ?92		64	3092	
461	2	788		BWZ	2833, 0&X1, 2	8		2788	V Q33 0|0 2		64	2833	000+1
462	2	796		A	KP100, 3091	7		2796	A ?81 ?91		64	3081	3091
463	2	803		BWZ	2833, 0&X1, S	8		2803	V Q33 0|0 S		64	2833	000+1
464	2	811		A	KP100, 3091	7		2811	A ?81 ?91		65	3081	3091
465	2	818		BM	2833, 0&X1	8		2818	V Q33 0|0 K		65	2833	000+1
466	2	826		A	KP100, 3091	7		2826	A ?81 ?91		65	3081	3091
467	2	833		B	0	4		2833	B 000		65	000	
468			*										
469	2	837		SBR	2873	4		2837	H Q73		65	2873	
470	2	841		SBR	X3, 0&X2	7		2841	H 099 0!0		65	099	000+2
471	2	848		MCW	2972, X1	7		2848	M R72 089		66	2972	089
472	2	855		BW	2890, FLAG	8		2855	V Q90 R36 1		66	2890	2936
473	2	863		C	X1, 3091	7		2863	C 089 ?91		66	089	3091
474	2	870		BE	0	5		2870	B 000 S		66	000	
475	2	875		BCE	2917, WORK&X1, 1	8		2875	B R17 KU1 1		66	2917	2241+1
476	2	883		A	K3999, X1	7		2883	A R55 089		67	2955	089
477	2	890		BW	2906, 2&X3	8		2890	V R06 0?2 1		67	2906	002+3
478	2	898		SBR	X3	4		2898	H 099		67	099	
479	2	902		B	2890	4		2902	B Q90		67	2890	
480	2	906		SBR	X3, 1&X3	7		2906	H 099 0?1		67	099	001+3
481	2	913		B	2863	4		2913	B Q63		67	2863	
482	2	917		A	K3999, X1	7		2917	A R55 089		68	2955	089
483	2	924		B	2863	4		2924	B Q63		68	2863	
484	2	928		CW	1&X3	4		2928	) 0?1		68	001+3	
485	2	932		B	1070	4		2932	B |70		68	1070	
486			*										
487	2	936	FLAG	DC	#1	1		2936			68		
488	2	937	DONE	BSS	SNAPSH, C	5		2937	B 333 C		68	333	
489	2	956		B	LOADNX	4		2942	B 700		68	700	
490			*										
491			* DATA										
492			*										
493	2	962	SX3	DCW	#3	3		2948			68		
494	2	965	SX1	DCW	#3	3		2951			69		
495	2	966	OP2	DCW	#1	1		2952			69		

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
496	2	969	K3999	DSA	3999	3		2955	I99		69	3999	
497	2	972		DCW	#3	3		2958			69		
498	2	973	KP1	DCW	&1	1		2959			69		
499	3	008	W35	DCW	#35	35		2994			70		
500	3	009	KPLUS	DCW	@&@	1		2995			70		
501	3	012	KSTAR3	DCW	@***@	3		2998			70		
502	3	013	NOP	NOP		1		2999	N		71		
503	3	017		DCW	@&-*@@	4		3003			71		
504	3	018	KEEPWM	DCW	#1	1		3004			71		
505	3	021		DCW	#3	3		3007			71		
506	3	024		DCW	#3	3		3010			71		
507	3	025	LCA	LCA		1		3011	L		71		
508	3	027		DCW	@01@	2		3013			71		
509	3	030	A001	DSA	1	3		3016	001		72	001	
510	3	032		DCW	#2	2		3018			72		
511	3	033	BARITF	B	ARITF ENTRY TO THE ARITHMETIC INTERPRETER	4		3019	B 700		72	700	
512	3	037	ASSIGN	DCW	@#@	1		3023			72		
513	3	040	SX3A	DCW	#3	3		3026			72		
514	3	041		DCW	@|@	1		3027			72		
515	3	045	KB4	DCW	#4	4		3031			72		
516	3	063	W18A	DCW	#18	18		3049			73		
517	3	064	OP	DCW	#1	1		3050			73		
518	3	070	OPS	DCW	@&-*@.#@	6		3056			73		
519	3	088	W18B	DCW	#18	18		3074			74		
520	3	091		DCW	#3	3		3077			74		
521	3	092		DCW	@0@	1		3078			74		
522	3	095	KP100	DCW	&100	3		3081			74		
523	3	103	GMWM	DCW	@}@	1		3082		GMARK	74		
524			XFR	BEGN36					B 838		75	838	
525			CLRME	CLRA	BEGN36,GMWM					MACRO			
			*	CLRA	CLRBOT,CLRTOP					GEN			
			*							GEN			
			*	CLEAR CORE	AFTER A PHASE USING THE CLRTOP ADDRESS					GEN			
			*							GEN			
526			ORG	BEGN36&X00					0900				
527			)0R003	EQU	* CLRBOT & X00 - 1			0899		GEN			
528			ORG	201					0201				
			*							GEN			
			*	CLEAR DOWN	TO CLRBOT & X00 THE EASY WAY					GEN			
			*							GEN			
529			CLRME	EQU	*&1			0201		GEN			
530			)0J003	CS	GMWM CLEAR FROM CLRTOP	4		0201	/ ?82	GEN	76	3082	
531			SBR	)0J003&3		4		0205	H 204	GEN	76	204	
532			SBR	)0L003&6		4		0209	H 250	GEN	76	250	
533			C	)0J003&3,)0M003	DOWN TO CLRBOT & X00?	7		0213	C 204 261	GEN	76	204	261
534			BU	)0J003		5		0220	B 201 /	GEN	76	201	
			*							GEN			
			*	NOW CLEAR	DOWN TO CLRBOT THE HARD WAY					GEN			
			*							GEN			
535			)0K003	C	)0L003&6,)0N003	7		0225	C 250 264	GEN	76	250	264

SEQ	PG	LIN	LABEL	OP	OPERANDS	SFX	CT	LOCN	INSTRUCTION	TYPE	CARD	A-ADDR	B-ADDR
536				BU	)0L003			5	0232	B 244 /	GEN	76	244
537				CS	LOADNX,)0Q003			7	0237	/ 700 271	GEN	77	700 271
538			)0L003	LCA	)0P003,0-0			7	0244	L 265 000	GEN	77	265 000
539				SBR	)0L003&6			4	0251	H 250	GEN	77	250
540				B	)0K003			4	0255	B 225	GEN	77	225
541			)0M003	DSA	)0R003			3	0261	899	GEN	77	899
542			)0N003	DSA	BEGN36			3	0264	838	GEN	77	838
543			)0P003	DCW	#1			1	0265		GEN	77	
544				DC	@CLRA @			5	0270		GEN	77	
545			)0Q003	DCW	@)@			1	0271		GEN	78	
546				ORG	*&1					0273			
547				XFR	CLRME					B 201		79	201

SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS	SYMBOL	ADDRESS
)OJ003	0201: 0	)OK003	0225: 0	)OL003	0244: 0	)OM003	0261: 0	)ON003	0264: 0	)OP003	0265: 0
)OQ003	0271: 0	)OR003	0899: 0	)9J002	0252: 0	)9R002	0253: 0	.LDNX	0700: 0	.PHAS	0110: 0
.TPER	0728: 0	.TPRD	0708: 0	A001	3016: 0	ARITF	0700: 0	ASSIGN	3023: 0	BARITF	3019: 0
BEGIN3	0838: 0	BEGN36	0838: 0	CLRME	0201: 0	DONE	2937: 0	FLAG	2936: 0	GM	2240: 0
GMWM	3082: 0	GOTOP	2683: 0	GOTWM	2672: 0	INNER	0948: 0	K3999	2955: 0	KB4	3031: 0
KEEPWM	3004: 0	KP1	2959: 0	KP100	3081: 0	KPLUS	2995: 0	KSTAR3	2998: 0	LCA	3011: 0
LOADAD	0838: 0	LOADNX	0700: 0	LOOP	0871: 0	M13X	1054: 0	MIDDLE	0924: 0	MORE	2039: 0
MOVE13	1019: 0	NOP	2999: 0	OP	3050: 0	OP2	2952: 0	OPS	3056: 0	OUTER	0901: 0
PHAS36	0201: 0	RWM1	2614: 0	RWM2	2720: 0	SAWNEG	0123: 0	SETUP	2573: 0	SETUPX	2724: 0
SKPSUB	2728: 0	SKPSUX	2754: 0	SNAPSH	0333: 0	SX1	2951: 0	SX3	2948: 0	SX3A	3026: 0
TESTEQ	0974: 0	TOP3	2600: 0	W18A	3049: 0	W18B	3074: 0	W35	2994: 0	WORK	2241: 0
WRKTOP	2572: 0	X1	0089: 0	X2	0094: 0	X3	0099: 0				

UNREFERENCED SYMBOLS

TOP3